09/847,598 May 2, 2001

AMENDMENTS TO THE CLAIMS

1.-4. (Cancelled)

:

5. (Previously Amended) A floor mopping assembly, comprising:

a first roller configured to let out a web mounted on a roll;

a second roller configured to reel in the web;

a motor system configured to cause transfer of the web between the first roller and the second roller;

a pad configured to press the web against a surface; and

a housing to enclose the motor system, the first roller, the second roller and the pad, wherein the motor system, the first and second rollers, and the pad are mounted in the housing such that the motor causes transfer of the web between the first and second rollers and between the pad and the surface, and

wherein the housing is part of an autonomous cleaning robot, and wherein the autonomous cleaning robot offloads the web after it has been soiled.

6. (Currently Amended) A floor mopping assembly, comprising:

a first roller configured to let out a web mounted on a roll;

a second roller configured to reel in the web;

a motor system configured to cause transfer of the web between the first roller and the second roller;

a pad configured to press the web against a surface, wherein the pad is compliant and non-absorbent; and

a housing to enclose the motor system, the first roller, the second roller and the pad, wherein the motor system, the first and second rollers, and the pad are mounted in the housing such that the motor causes transfer of the web between the first and second rollers and between the pad and the surface, and

wherein the floor mopping assembly automatically loads or offloads a length of the web.



09/847,598 May 2, 2001

7.-8. (Cancelled)

9. (Previously Amended) A floor mopping assembly, comprising:

a first roller configured to let out a web mounted on a roll, wherein the roll of web is encased in a watertight compartment;

a second roller configured to reel in the web;

a motor system configured to cause transfer of the web between the first roller and the second roller;

a pad configured to press the web against a surface; and

a housing to enclose the motor system, the first roller and its watertight compartment, the second roller, and the pad, wherein the motor system, the first and second rollers, and the pad are mounted in the housing such that the motor causes transfer of the web between the first and second rollers and between the pad and the surface.

10.-11. (Cancelled)

12. (Previously Amended) A floor mopping assembly, comprising:

a first roller configured to let out a web mounted on a roll, wherein the roll of web is encased in a disposable assembly;

a second roller configured to reel in the web;

a motor system configured to cause transfer of the web between the first roller and the second roller;

a pad configured to press the web against a surface; and

a housing to enclose the motor system, the first roller, the second roller and the pad, wherein the motor system, the first and second rollers, and the pad are mounted in the housing such that the motor causes transfer of the web between the first and second rollers and between the pad and the surface.

13.-16. (Cancelled)

09/847,598

May 2, 2001

17. (Currently Amended) A floor mopping assembly, comprising:

a computerized mobile chassis;

a first roller configured to let out a roll of <u>moistened</u> webbing, wherein the roll of webbing is encased in a watertight compartment;

a second roller configured to reel in the webbing; and

a motor system configured to cause transfer of the webbing between the first roller and the second roller, wherein the motor system, the first roller and its watertight compartment, and the second roller are conveyed by the chassis.

18.

18. (Previously Amended) A floor mopping assembly, comprising:

a computerized mobile chassis;

a first roller configured to let out a roll of webbing, wherein the roll of webbing is encased in a disposable assembly;

a second roller configured to reel in the webbing; and

a motor system configured to cause transfer of the webbing between the first roller and the second roller, wherein the motor system and the first and second rollers are conveyed by the chassis.

19.-22. (Cancelled)

- 23. (Previously Amended) A method of mopping a surface with a floor mopping device, the method comprising:
 - a) connecting a roll of webbing on a feed roller to a take-up roller;
 - b) moving the floor mopping device without human intervention;
 - c) pressing on a portion of the webbing such that the webbing cleans the surface; and
 - d) transferring the portion of the webbing to the take-up roller, wherein the transferring includes determining when the webbing is soiled.
- 24. (Previously Amended) A method of mopping a surface with a floor mopping device, the method comprising:

09/847,598 May 2, 2001

:

a) connecting a roll of webbing on a feed roller to a take-up roller;

- b) moving the floor mopping device without human intervention;
- c) pressing on a portion of the webbing such that the webbing cleans a surface; and
- d) transferring the portion of the webbing to the take-up roller, wherein the transferring includes determining when the mopping device has cleaned a predetermined area of the surface.

25.-27. (Cancelled)

28. (Currently Amended) A floor mopping system, comprising:

a floor mopping assembly, comprising:

a first roller configured to let out a web mounted on a roll;

a second roller configured to reel in the web;

a motor system configured to cause transfer of the web between the first roller and the second roller;

a pad configured to press the web against a surface; and

a housing to enclose the motor system, the first roller, the second roller and the pad, wherein the motor system, the first and second rollers, and the pad are mounted in the housing such that the motor causes transfer of the web between the first and second rollers and between the pad and the surface; and

a master controller separately housed from the floor mopping assembly, in data communication with the floor mopping assembly, and configured to control the floor mopping assembly, wherein the master controller is an autonomous mobile robot.

- 29. (Previously Added) The system of Claim 28, wherein the housing is part of a cleaning robot.
- 30. (Previously Added) The system of Claim 28, wherein the master controller includes sensors.



: 09/847,598

Filed

May 2, 2001

31. (Previously Added) The system of Claim 28, wherein the master controller directs movement of the floor mopping assembly.

- 32. (Cancelled) The system of Claim 28, wherein the master controller is an autonomous mobile robot.
- 33. (Previously Added) The system of Claim 28, wherein the master controller is a stationary computer.
- 34. (Previously Added) The system of Claim 28, wherein the system includes one or more additional floor mopping assemblies controlled by the master controller.
- 35. (Previously Added) The system of Claim 28, wherein the pad is closed-cell foam or self-skinning open-cell foam.
- 36. (Previously Added) The system of Claim 28, wherein a portion of the roll of web is moistened prior to being pulled by the motor driven roller.
- 37. (Previously Added) The system of Claim 28, wherein the web comprises a paper-based material.
- 38. (Previously Added) The system of Claim 28, wherein the web comprises a cloth-based material.
- 39. (Currently Amended) A floor mopping system, comprising:

a floor mopping assembly, comprising:

a computerized mobile chassis;

a first roller configured to let out a roll of webbing;

a second roller configured to reel in the webbing; and



: 09/847,598

May 2, 2001

a motor system configured to cause transfer of the webbing between the first roller and the second roller, wherein the motor system and the first and second rollers are conveyed by the chassis; and

a master controller separately housed from the floor mopping assembly, in data communication with the floor mopping assembly, and configured to control the floor mopping assembly, wherein the master controller is an autonomous mobile robot.

- 40. (Cancelled) The system of Claim 39, additionally comprising a housing to enclose the chassis, the motor system, the first roller and the second roller, wherein the motor system, and the first and second rollers, are mounted such that the motor causes transfer of the webbing between the first and second rollers and one of the rollers is configured to rest on a surface.
- 41. (Previously Added) The system of Claim 39, wherein the master controller includes sensors.
- 42. (Previously Added) The system of Claim 39, wherein the master controller directs movement of the floor mopping assembly.
- 43. (Cancelled) The system of Claim 39, wherein the master controller is an autonomous mobile robot.
- 44. (Previously Added) The system of Claim 39, wherein the master controller is a stationary computer.
- 45. (Previously Added) The system of Claim 39, wherein the system includes one or more additional floor mopping assemblies controlled by the master controller.
- 46. (Previously Added) The system of Claim 39, wherein the chassis includes at least one drive motor configured to provide mobility.

: 09/847,598

Filed

May 2, 2001

47. (Previously Added) The system of Claim 39, wherein the chassis includes a processor configured to control the motor system.

48. (Currently Amended) A floor mopping system, comprising:

means for floor mopping, comprising:

a computerized mobile chassis;

first means for letting out a portion of webbing;

second means for taking up the webbing; and

motor means for causing transfer of the webbing between the first means and the second means; and

<u>control</u> means, separately housed from the means for floor mopping, and in communication with the means for floor mopping, for controlling the means for floor mopping, wherein the control means is configured to autonomously navigate through an environment.

- 49. (Currently Amended) A method of mopping a surface with a floor mopping device, the method comprising:
 - a) connecting a roll of webbing on a feed roller to a take-up roller;
 - b) transmitting control signals from an autonomous master controller to the floor mopping device;
 - c) moving the floor mopping device based on the received control signals;
 - d) sensing the movement of the floor mopping device thereby tracking the location of the floor mopping device;
 - d) e) pressing on a portion of the webbing such that the webbing cleans the a surface; and
 - e) f) transferring the portion of the webbing to the take-up roller.
- 50. (Previously Added) The method of Claim 49, additionally comprising repeating b)-e) whereby an entire floor surface is mopped clean.



09/847,598

Filed

May 2, 2001

- 51. (Previously Added) The method of Claim 49, wherein the transferring includes moving the webbing via a motor system.
- 52. (Cancelled) The method of Claim 49, wherein the transferring includes determining when the webbing is soiled.
- 53. (Cancelled) The method of Claim 49, wherein the transferring includes determining when the mopping device has cleaned a predetermined area of the surface.
- 54. (Previously Added) The method of Claim 49, additionally comprising moistening a predetermined amount of the webbing prior to the pressing.
- 55. (**Previously Added**) The method of Claim 54, wherein the moistening comprises applying a cleaning agent to the webbing.
- 56. (Previously Added) The method of Claim 54, wherein the moistening comprises applying a wax to the webbing, such that the surface is waxed.
- 57. (New) A floor mopping system, comprising:
 - a floor mopping assembly, comprising:
 - a computerized mobile chassis;
 - a first roller configured to let out a roll of webbing;
 - a second roller configured to reel in the webbing;
 - a motor system configured to cause transfer of the webbing between the first roller and the second roller, wherein the motor system and the first and second rollers are conveyed by the chassis; and
 - a housing to enclose the chassis, the motor system, the first roller and the second roller, wherein the motor system, and the first and second rollers, are mounted such that the motor causes transfer of the webbing between the first and second rollers and one of the rollers is configured to rest on a surface; and



09/847,598

Filed

May 2, 2001

a master controller separately housed from the floor mopping assembly, in data communication with the floor mopping assembly, and configured to control the floor mopping assembly.

- 58. (New) A method of mopping a surface with a floor mopping device, the method comprising:
 - a) connecting a roll of webbing on a feed roller to a take-up roller;
 - b) transmitting control signals from an autonomous master controller to the floor mopping device;
 - c) moving the floor mopping device based on the control signals;
 - d) pressing on a portion of the webbing such that the webbing cleans a surface; and
 - e) transferring the portion of the webbing to the take-up roller, wherein the transferring includes determining when the webbing is soiled..
- 59. (New) A method of mopping a surface with a floor mopping device, the method comprising:
 - a) connecting a roll of webbing on a feed roller to a take-up roller;
 - b) transmitting control signals from an autonomous master controller to the floor mopping device;
 - c) moving the floor mopping device based on the control signals;
 - d) pressing on a portion of the webbing such that the webbing cleans a surface; and
 - e) transferring the portion of the webbing to the take-up roller, wherein the transferring includes determining when the mopping device has cleaned a predetermined area of the surface.
- 60. (New) The assembly of Claim 17, wherein the second roller is not in the watertight compartment.
- 61. (New) The assembly of Claim 17, wherein the watertight compartment has a seal around an opening of the compartment, such that the webbing remains moistened between uses.